

IN THE CLAIMS:

Please CANCEL claims 1, 2, 8-16, and 22 without prejudice to or disclaimer of their subject matter. Please AMEND claims 3, 7, 17, and 21 as follows:

1-2. (Cancelled)

3. (Currently Amended) An image input apparatus comprising:

image pickup means for converting an optical image from an object into electrical image information and accumulating the electrical image information[[],];

shielding means for shielding said image pickup means from incidence of the optical image[[],]; and

processing means for processing the image information from said image pickup means,

wherein said processing means comprises:

first image information acquiring means for acquiring first image information by closing said shielding means before image pickup,

second image information acquiring means for repetitively acquiring, a first predetermined number of times with said shielding means open, second image information accumulated in said image pickup means within a predetermined period,

first subtraction processing means for executing a subtraction process between each ~~acquisition result~~ second image information acquired from said second image information

acquiring means and the ~~acquisition result~~ first image information acquired from said first image information acquiring means,

first addition means for adding the subtraction results from said first subtraction processing means,

third image information acquiring means for repetitively acquiring, a second predetermined number of times ~~while said image pickup means is~~ with said shielding means closed after image pickup, third image information accumulated in said image pickup means within a predetermined period,

second subtraction processing means for performing a subtraction process between each ~~acquisition result~~ third image information acquired from said third image information acquiring means and the ~~acquisition result~~ first image information acquired from said first image information acquiring means,

second addition means for adding the subtraction results from said second subtraction processing means, and

adding-up means for adding up said first and second addition means.

4. (Original) An apparatus according to claim 3, wherein the first predetermined number of times and the second predetermined number of times are the same.

5. (Original) An apparatus according to claim 3, wherein said second addition means comprises repetitive addition means for continuously repetitively adding, a plurality of times, the subtraction results obtained by said second subtraction processing means.

6. (Original) An apparatus according to claim 3, wherein the second predetermined number of times is smaller than the first predetermined number of times.

7. (Currently Amended) An apparatus according to claim 6,  
wherein said processing means further comprises:  
fourth image information acquiring means for acquiring fourth image information a third predetermined number of times with said shielding means closed, at timings different from the acquisition timings of said third image information acquiring means,  
normalizing means for normalizing the fourth image information acquired by said fourth image information acquiring means by the third predetermined number of times, and  
image processing means for performing image processing on the basis of the addition result from said first addition means and the normalization result from said normalizing means.

8-16. (Cancelled)

17. (Currently Amended) An image data processing method comprising:  
an image pickup step of converting an optical image from an object into electrical image information and accumulating the electrical image information in image pickup means[.,,];  
a shielding step of shielding said image pickup means from incidence of the optical image by using shielding means[.,,]; and

a processing step of processing the image information from said image pickup means,

wherein said processing step comprises:

a first image information acquisition step of acquiring first image information by closing said shielding means before image pickup,

a second image information acquisition step of repetitively acquiring, a first predetermined number of times with said shielding means open, second image information accumulated in said image pickup means within a predetermined period,

a first subtraction processing step of executing a subtraction process between the repetitively acquired second image information and the first image information,

a first addition step of adding the subtraction results obtained in the first subtraction processing step to calculate a first sum,

a third image information acquisition step of repetitively acquiring, a second predetermined number of times ~~while said image pickup means is~~ with said shielding means closed after image pickup, third image information accumulated in said image pickup means within a predetermined period,

a second subtraction processing step of performing a subtraction process between the repetitively acquired third image information and the first image information,

a second addition step of adding the subtraction results obtained in the second subtraction processing step to calculate a second sum, and

an adding-up step of adding up the first and second sums.

18. (Original) A method according to claim 17, wherein the first predetermined number of times and the second predetermined number of times are the same.

19. (Original) A method according to claim 17, wherein said 25 second addition step comprises a repetitive addition step of continuously repetitively adding, a plurality of times, the subtraction results obtained in said second subtraction processing step.

20. (Original) A method according to claim 17, wherein the second predetermined number of times is smaller than the first predetermined number of times.

21. (Currently Amended) A method according to claim 17,  
wherein said processing step further comprises:  
a fourth image information acquisition step of acquiring fourth image information a third predetermined number of times with said shielding means closed, at timings different from the acquisition timings in the third image information acquisition step, and  
a normalization step of normalizing the fourth image information acquired in said fourth image information acquisition step by the third predetermined number of times, and  
an image processing step of performing image processing on the basis of the addition result in said first addition step and the normalization result in said normalization step.

22. (Cancelled)